THE ARIZONA SILVER BELT.

VOL. XVIII. GLOBE, ARIZONA, SATURDAY, SEPTEMBER 28, 1895. NO. 27

OFFICIAL DIRECTORY.

Territorial.

Governor—L. C. Hughes, Tucson.
Treasurer—P. J. Cole, Phœnix.
Superintendent of Public Instruction—F J. Netherton, Phœnix.
Auditor—C. P. Leitch.
Supreme Court—A. C. Baker, Chief Justice, Phœnix; Owen T. Rouse, Associate Justice, Tucson; J. D. Bethune, Associate Justice, Tucson.
U. S. District Attorney—E. E. Ellinwood, Tucson.
U. S. Marshal—W. K. Meade.
Surveyor General—L. H. Manning, Tucson.
Delegate to Congress—Nathan O. Murphy, Prescott.
Judge of First Judicial District—J. D. Bethune.
Judge of Second Judicial District—Owen T. Rouse Tucson.
Judge of Third Judicial District—A. C. Baker.
Judge of the Fourth Judicial District—J. J. Hawkins, Prescott.

Gila County.

Judge of District Court—Owen T. Rouse.
Clerk of District Court—O. N. Creswell.
Judge of Probate—Mills Van Wagenen.
Sheriff—J. H. Thompson.
Under Sheriff—F. T. Frush.
District Attorney—J. W. Wentworth.
Recorder—G. M. Allison.
Supervisors—E. H. Cook, D. Devore, B. F. Stewart.
Clerk of Board of Supervisors—G. M. Allison.
County Treasurer—H. C. Hitchcock.

DISTANCE, TEMPERATURE, ALTITUDE, ETC.

Distance from Globe to—

San Carlos	28½ miles
Ft. Thomas	65½ miles
Willcox	123 miles
Casa Grande	88 miles
Armer	35 miles
Pinto	61 miles
Rye	77 miles
Payson	49 miles
Pine	109 miles
Strawberry	116 miles
Riverside	36 miles
Florence	68 miles
Elevation above sea level at Globe	3500 feet
Latitude	33 deg. 10 min
Longitude	110 deg. 45 min
Highest maximum temperature	110 deg
Lowest maximum temperature	16 deg
Mean temperature	63 deg
Prevailing direction of wind	Southwest

An observation extending over several years discloses the remarkable fact that there has not been a day without more or less sunshine.

PROFESSIONAL CARDS.

SECRET SOCIETIES.

I. O. O. F.

GLOBE LODGE NO. 6—MEETS first and third Mondays in each month, in Court House. Visiting brothers cordially invited.
W. A. WILSON, N. G.
ALONZO BAILEY, Secretary.

RESCUE LODGE, NO. 12—MEETS second and fourth Wednesdays in each month, at Court House. Visiting brothers in good standing are cordially invited to attend.
FRANK L. GATES, N. G.
P. T. ROBERTSON, Secretary.

GILA ENCAMPMEFT NO. 3,—Meets on the second and fourth Fridays in each month, at the Court House. Visiting brethren in good standing cordially invited to attend.
H. C. HITCHCOCK, C. P.
WM. ZIMMERMAN, Scribe.

Masonic.

REGULAR COMMUNICATION of White Mountain Lodge, No. 3, A. F. & A. M., meet Thursdays, on or succeeding each full moon. Sojourning brethren in good standing cordially invited. By order of the W. M.
CHAS. HOLZMAN, Sec'y.

Knights of Pythias.

PINAL MOUNTAIN LODGE NO. 11. Regular meetings Tuesday night of each week, at Masonic Hall. All brothers in good standing are cordially invited.
D. S. HERON, C. C.
M. BORQUES, JR., K. R. S.

THE TOWER OF BABEL.

To Be Reproduced in Miniature for the Atlanta Fair.

A Feature of the Coming Exposition That Will Be Interesting and Instructive to Visitors of All Ages and Callings.

The Smithsonian Institution is preparing a miniature model of the Tower of Babel for the exposition of Atlanta. It will be in all respects, so far as possible, a faithful reproduction of the famous original. The latter was the greatest of the many magnificent temples of Babylon, being one hundred and forty feet high. That does not seem much compared with the Washington monument, but people in those days were not accustomed to tall structures, and the ancient capital of Assyria was situated in the midst of a vast plain, where there were no natural elevations to serve for comparison. The model in question, says the Washington Star, will be five feet eight inches square on the first story. When it is stated that the first story of the actual Tower of Babel was seventy-two feet square, a notion will be given of the proportion. The original building was constructed in diminishing stories, each one being a smaller square than that beneath. This was a common style of architecture in Assyria, and from it evolved the Egyptian pyramid. The stories for the model are square wooden frames of different sizes, so made that they may be superposed one upon another. These frames, after being put together, will be faced on the outside with a veneer of plaster of paris, which will imitate the sun-dried bricks of which the tower was composed.

The building of the model is under the charge of Dr. Palmer. The work, however, is superintended by Dr. Cyrus Adler, who has made an exhaustive study of the historic Tower of Babel. Mechanically speaking, the most difficult part of the job is the casting of the plaster of paris that is to imitate the bricks. Every brick on the exterior of the structure is represented and this is accomplished by making a single mold, in which the little bricks are laboriously indicated. From this mold many casts are made, and so the whole surface is covered. The Babylonians had no stone, and so they were obliged to employ for all their buildings such sun-dried bricks. They did not understand the use of molds for the purpose. Naturally, structures of such material soon crumbled and did not last very long.

The Tower of Babel stood upon an elevated platform of earth six hundred feet square. This was surmounted and retained by a wall of bricks ten feet high. Both platform and wall will be represented in the model, which will be quite an imposing affair when finished. The stories will be painted in different colors, to imitate the original building, according to descriptions given of it in Assyrian literature. The first story was black, in honor of Saturn; the second story of orange, for Jupiter; the third story red, for Mars; the fourth story covered with plates of gold, for the sun; the fifth story white, for Venus; the sixth story dark blue, for Mercury, and the seventh story covered with plates of silver, in honor of the moon.

The old Babylonians were worshipers of the sun, and knew a lot about astronomy. The Tower of Babel was an observatory from which the priests gazed upon the stars in the heavens, drawing portents from them, presumably for sale at so much a portent. The model will have no windows, for it is not known whether or not the original edifice possessed any. Nobody, as yet, has been able to discover how the houses of the Assyrians were lighted. It may be that all the light required for this mighty temple was admitted from the top, which was presumably open to the sky. The stairs were on the outside, and not on the inside of the building. They also will be shown. In fact, no detail will be omitted that may help to give a notion of the exact appearance of this wonderful edifice of antiquity.

DANGER IN THE USE OF SLANG.

Experience in Brooklyn Shows Peril in the Word "Rats."

A new illustration of the dangerous confusion that often is created by the prevalence of slang is furnished, says the Brooklyn Times, by an incident reported in this morning's news. A professional rat catcher went to a fashionable club the other evening, and at midnight he had bagged fifty rats. With the fifty living rats in a bag—for this professional scorns to kill any rats on the premises—he left the fashionable club and started home. Then appeared an unknown policeman, who said: "Where are you going?" "None of your business," answered the rat catcher. "So that's your swag," said the policeman, sarcastically, tapping the bag with his club. "Nary swag," said the rat catcher. "What have you in the bag, then?" Here we come to the first crisis of the story, for the reply was "Rats." The policeman then punched the professional for what he, perhaps reasonably, regarded as his impertinence. Moreover, he grabbed the bag and thrust in his inquiring, official hand. Here comes the second crisis of the story, for at least seven rats grabbed that hand. The policeman yelled, and shook off the rats, and, the other forty-three leaping from the bag, the street was soon full of rats. The poor policeman, with rats to the right of him and rats to the left of him and rats in an indefinite vista before and behind him, fled into the night.

This is not the first time that slang has indirectly created confusion in the world. The rat catcher had no suspicion that the policeman would take his explanation amiss. This is the trouble. The slang that creates disaster is generally used unwittingly. May the present picturesque warning be heeded.

WORLD'S EXPENSIVE BRIDGES.

The Structure Uniting New York and Brooklyn Heads the List.

The very latest official computation puts the total cost of the Brooklyn bridge at $17,489,855. The bridge when contracted for was to cost $10,000,000. At least, such was the original estimate of John A. Roebling, who in 1867 put the cost of the bridge at $7,000,000 and of the approaches to it $3,800,000. Actually, the bridge cost $15,000,000, which was not much of an increase over the original figures when the difficulties of the undertaking came into account, the bridge not being opened until sixteen years after the original estimate was made. Subsequent expenditures, which have brought the total cost up to the present figure, are due to the acquisition of new approaches and to improvements upon the structure which were not and could not have been calculated upon when it was opened twelve years ago.

The Brooklyn bridge is the most expensive work of the kind in the world, exceeding in cost any other bridge of which authentic figures are available. The bridge over the Forth, in Scotland, cost $14,000,000, the Victoria bridge in Canada cost $12,000,000, the bridge across the Volga at Caratovi in Russia, cost $4,000,000. The cost of London bridge was $10,000,000, of Waterloo bridge $5,500,000, and of the Westminster bridge $2,500,000.

With the enormous increase of viaduct work for railroad purposes in the United States the profession of "bridge builder" has become a very important one, steel and iron work having largely superseded masonry, since by improved processes in their manufacture structural iron and steel have materially decreased in cost.

GOOD AS GOLD.

How Unused Railway Tickets May Be Redeemed at Slight Cost.

Some men with valuable unused railway tickets on their hands sell them to scalpers, while others go to the railway company that issued them and obtain their value in money. Most men, however, do neither, and accept the loss when the ticket is worth less than one dollar. Indeed, many men do not realize that railway companies stand ready to redeem unused tickets, even of small value, so that the companies must be richer by many thousands of dollars per year by reason of this neglect or ignorance.

Every railway ticket bears the name of the general passenger agent of the road issuing the same. It is a simple matter to inclose the ticket with a letter directed to the general passenger agent, asking him to refund the money paid, and explaining the reason why the ticket is left unused in the hands of the purchaser. It is courteous to inclose a stamped envelope in which the money may be returned.

When all these things have been done, says the New York Sun, the company usually acknowledges the receipt of the ticketholder's communication and promises [illegible] to investigate the matter. The investigation consists in the proper identification of the ticket and a little bookkeeping to set all right in the accounts. Then the purchaser receives from the company a check for the amount due, along with a letter requesting acknowledgment on the part of the recipient. That closes the transaction, and there is no material loss on either side.

SMOKEJACKS AND CAPS.

An Increasing Number Coming Into View Upon the City's Housetops.

"It seems to me," said a New York citizen recently, "that there is a very striking increase in the number of chimneypots and smokejacks and smokecaps visible in the city. The chimneypots are mostly of the conventional form, like a slightly tapering cone with the top cut off; the smokejacks and caps are of various heights and styles. I suppose the object of all these things is to improve the draught of the chimney. I don't know why we should have more of them now than we used to, whether it is on account of some difference in the construction of our chimneys, which makes them necessary; whether we are not satisfied with a draught that would have satisfied us years ago, and want the chimney to draw better as we want and expect to have everything better nowadays; or whether the construction in these days of many higher buildings has made such changes in the air currents and atmospheric conditions generally as materially to affect the draught of many chimneys; but I know there are more chimney pots.

"This last idea about the breaking up of the air currents and that sort of thing seemed at first to account in some measure for the greater number of the newer chimneypots; but when I come to think of it I remember that in London riding along a viaduct on trains going in or out of the city, I looked down on I should say hundreds of thousands of chimneypots in districts where hundreds of acres were covered with small houses of unvarying uniformity in height. There wasn't any deflection of currents here, but I doubt if there was a chimney without its chimneypot, a thick stubble of chimneypots, and a most fascinating sight it was, too, and a fascinating thought to think of the myriads of people that dwelt beneath them.

"Our chimneypots have not yet by any means attained that striking effect. They are still greatly scattered; but, with the smokejacks and the smokecaps, they are now sufficiently numerous to add to the city a feature of picturesqueness."

Saved His Conscience.

The comptroller of the treasury is an autocrat whose decision overrides even that of the chief magistrate of the nation. Some years ago, the then incumbent of the office refused to sign a warrant for money which Gen. Grant thought it proper to expend. "That is right," the president said, "I admire your firmness. Where your conscience is concerned never permit yourself to be coerced. You may consider yourself clear in this affair, for I shall appoint a new comptroller to-morrow."

UNCLE SAM'S INDIANS.

An Official Estimate of Their Cost to the Government.

A Difficult and Intricate Problem That Has Never Been Attempted Before—Warfare with the Redmen.

In the complete Indian census report, just published, an interesting attempt is made for the first time to cast up in figures an aggregate of the government expenditures on account of the red men residing within our borders since the union was established in 1789. The result of this remarkable attempt indicates in the statistics presented that the gigantic sum of one billion one hundred and five million odd dollars ($1,105,219,327) was spent by the government up to the year 1890, either upon the Indian directly, or indirectly because of Indians. Counting in, however, the civil and military expenses for Indians since then, together with incidental expenses not recognized in the official figures given, it is safe to say that up to June 30, 1895, a further sum of $114,780,628 may be added to the foregoing figures, making a grand aggregate of $1,250,000,000 chargeable to Indians to date.

The problem, says the Washington Star, is such a difficult and intricate one that it has never been attempted before. The prime factors entering into the problem are: (1) The expenses of the wars waged between the federal government and the Indian tribes since the date mentioned and the maintenance of our standing army in the vicinity of the reservations; (2) the claims of the states for indemnity for expenses incurred in repelling Indian invasions; (3) the civil and educational expenses incurred on account of Indians, and (4) the cost of pensions to the survivors or widows of soldiers serving in Indian wars.

Of course, a large amount of treasure was spent in wars with the American Indians prior to the establishment of the federal government in 1789. Indeed, ever since the white man appeared within the present territory of the United States there has been war almost continually, beginning on the Pacific side in 1539, and on the Atlantic side soon after the year 1600. Since the founding of our government the United States army, except when engaged in the wars with Great Britain and Mexico, and during the civil war, has been used almost exclusively in the Indian service, and has been stationed largely in the Indian country or along the frontier.

In their calculation the Indian census experts omit the army expenses incident to the wars with England and Mexico, and the civil war, with its sequel of reconstruction, and safely counts two-thirds of the total expenses of the army as chargeable directly or indirectly to the Indians. The total expenses of the army from 1789 to 1890 were found to be $4,725,521,495; but deducting $3,514,911,007 for the foreign wars and the civil war, the remainder is $1,210,610,489. Fully two-thirds of this sum, or $807,073,658, it is estimated, was expended for Indian wars and for army service against the Indians.

To this sum the census experts add the expenses of the Indian civil administration for the period between 1789 and 1890, amounting to $259,044,093, and $10,000,000 more to reimburse particular states for expenses incurred by them in Indian wars, and $28,501,632 more for pensions to survivors or widows of Indian wars, and then the total foots up to $1,105,219,373. Counting in, as suggested above, $144,780,628 for civil administration expenses and a proportionate share of the army expenses since 1890, the grand total becomes $1,250,000,000—a billion and a quarter of dollars.

The Indian wars under the government of the United States are stated to have numbered more than 40, and to have cost the lives of about 19,000 white men, women and children, including about 5,000 killed in individual encounters, of which history takes no note, and of 30,000 Indians, including 8,500 killed in personal encounters.

It has been the policy of the national government since the year 1828 to refund to the states and territories the moneys paid out by them in suppressing Indian hostilities. This liability is based on the fact that the federal government has treated the Indians either as nations or as wards of the nation, thus keeping them from control by the several states.

Speaking of the number of Indians now in the United States, as shown by the reports of special agents, and the number supposed to have lived in the past, the census editor says: "It is not probable that the present area of the United States since the white man came has contained at one time more than 500,000 Indians. High estimates were made in the early days, but the average even then was about 1,000,000. In 1890 we have 248,253 civilized and uncivilized Indians. Through almost four centuries warlike bands have resisted, and many of these Indians are still resisting progress. There are not 10 tribes out of any of the 200 or more now in the United States but that have been in revolt, and those existing as tribes are now remnants, with a few exceptions, too poor or too few to fight, or they consider it too dangerous."

The Cayuse as a Pest.

The Indian cayuse is the worst pest that inflicts this country. The Indian horses spread all over the ranges, and are not confined within the reservation limits. It is estimated that fifteen thousand worthless wild ponies range unrestrained over the hills of this country and devour the good bunch grass. These cayuses each eat enough good fodder to fatten a four-year-old steer, and one steer is worth more than ten glass-eyed broncos. If we could enact a law to declare every pony of an assessed value of less than one dollar a public nuisance, it would add materially to the prosperity of this country.

A TOUCH OF KINDNESS.

The Tramp's Humane Impulse Brought Him No Reward.

He sat slouchingly upon the end of the park bench, his head hanging listlessly over his breast, says the New York World. There was complete dejection in his attitude. An old hat resembling a piece of "culls" in a rag shop lay on the ground, where it had fallen from his head. On one foot was an old felt slipper and on the other an old riding boot, with the top cut off. His trousers and coat were of a dull, mottled gray that comes from hard wear and dust.

Twice he had been moved on by the "sparrow cop" and he had made his way to a bench that was secluded and shaded by a tree. He had gone to sleep.

In the tree the sparrows hopped and twittered in the shade of the foliage. Suddenly through the branches came twisting a tiny featherling, striving hard to make its tender wings bear up the weight of its body. It failed and fell on the graveled walk at the old tramp's feet, stunned and breathing with difficulty. Something caused the tramp to open his eyes and they lit on the little sparrow. He looked at it stupidly for a minute, then, drawing his hand across his forehead, he leaned over and picked it up tenderly. He gazed at it in a wondering way and then glanced up at the branches of the tree, where the mother bird fluttered and chirruped in fright.

He drew the bench a little closer to the tree and climbed upon it. That put him within reach of a lower limb. He laid the little bird carefully on a forked branch and, with a strength surprising in one so feeble, he drew himself up and sat on the limb. Above him, within reach, he saw a nest. It was tipped over so that he could see in it two downy bits of birds like the one he had. He gently placed the bird he carried in the nest, let himself down to the ground, drew the bench back to its original place and turned to go just as a "gray coat" called out to him: "Come, now, get on. You've been around here long enough!"

A VALUABLE PEBBLE.

The Accidental Good Fortune of a Hunter in India.

Precious stones are still numerous in certain districts of India, and occasionally a fine gem is found by a sportsman or traveler. A young English officer, returning from an unsuccessful hunt on the estate of a petty chief, picked up a stone which lay in his path, and idly threw it against a rock. It broke in a dozen pieces and out fell a brilliant pebble. The Englishman picked it up, looked at it, and was about to throw it away, but changed his mind. "I'll keep it," said he, "as a memento of a day's hunt when I didn't shoot so much as a rat." Some days later, in Bombay, while having his watch repaired, he showed the stone to the jeweler, and asked its worth. "I'll give you twenty pounds for it," said the jeweler, after a careful examination. Had he offered a shilling he might have been told to take the stone and keep the shilling, but the offer of twenty pounds aroused the officer's suspicions, so he responded, with a laugh: "I dare say you would give me that and a trifle more, but I'm going to take it to England." He did so, and sold his "pebble" in London for $15,000.

Old-Time Football.

Football has never been a very gentle game, to judge from what Master Stubbes says about it in his "Anatomie of Abuses," published in 1583. For as concerning football playing, I protest unto you it may rather be called a friendly kinde of fight than a play or recreation; a bloody and murthering practice than a sport or pastime. For dooth not every one lye in waight for his adversarie, seeking to overthrow him and to picke him on his nose, though it be on hard stones, so that by this meanes, sometimes their necks are broken, sometimes their backs, sometimes their legs, sometimes their armes; sometimes one part thrust out of joynt, sometimes another; sometimes the noses gush out with blood, sometimes their eyes start out.

Mac's Rejoinder.

The captain of a Cunard liner one day while crossing the "herring pond," found that his ship was not doing the speed he considered she ought to, and, putting on his best frown, he went down to the room of the chief engineer, a hard and dry Scotchman and an amateur violinist. The captain knocked at the door; the gay chords of a Scotch reel played on a fiddle was the only answer to his summons, so he burst the door open. "Mr. Mac," he thundered, "what are you about? I am not at all satisfied with your engines; we go like snails, sir." Mr. Mac made a flourish with his bow, and, after a jolly chord, said: "Sair, my engines should hae been in Liverpool these three days. It's your slow old ship that's at fault!"

THE TELEPHONE IDEA.

First Suggested in This Country by the Croaking of Frogs.

Something About Dr. Cushman, the Constructor of the First Transmitter, and the Manner of His Discovery.

It is not common knowledge, except to those familiar with electrical and telephone history, that the first telephone was constructed in Racine, Wis., and that the inventor, Dr. S. D. Cushman, is now a resident of Chicago, says the News, of that city.

His litigation with the Bell Telephone company, extending over a period of ten years and costing one hundred thousand dollars, has been reported from a legal standpoint, but as it is one of Mr. Cushman's principles that personal reminiscences are in bad taste, he has seldom given a formal interview. The venerable inventor, seventy-seven years of age, who built the first telegraph lines in this part of the "far west," pursues his business with more alertness to affairs than the average young man.

In a corner of the room is a large, worn piece of muslin on which is painted in thin colors a representation of a telegraph line stretching away in the distance, connected with a crude instrument, set on two logs, near which is a frog sitting by a stream. This old relic represents the telegraph line of "good cedar posts," which Dr. Cushman constructed west from Racine for the Erie & Michigan Telegraph company in 1851, and the experimental lightning arrester which led to his discovery.

It is a reminder of the days when Dr. Cushman was associated with Prof. Morse in the pioneer days of telegraphy. On his desk is the first telephone transmitter, constructed in 1851; twenty-five years before the Bell patents were taken out. It is a small, square box, with a speaking orifice and containing mechanism on the same principle as that of the modern transmitter.

In 1851 Dr. Cushman undertook the construction of a lightning arrester, his object being to take the lightning that struck the wire and run it into the ground, the instrument being so constructed that it would not interfere with the light current used in telegraphing. This instrument was placed out on the prairie on two logs and in order to know when it had operated a triple magnet with a sheet of thin iron at the poles, similar in construction to a modern "receiver," was placed in the corner of the box. In case the lightning passed through the instrument the electro-magnet would pull this strip of iron down into the range of a permanent magnet, which would retain it until the instrument was inspected.

A similar device was placed in the basement of the building at Racine and connected with the other end of the line. One day while a thunderstorm was coming up, and Dr. Cushman was watching the instrument, the croaking of frogs was heard, thirteen miles away. This is the explanation of how the old painting with the crude instrument and the croaking frog is identified with the discovery of the telephone.

Dr. Cushman is the inventor of the fire-alarm system in use in Chicago. His patent-office reports, he says, "would weigh a ton," and contain a great number of his electrical patents. To the priority of Dr. Cushman there is said to be no doubt, and the contest of the validity of the Bell patents began in 1885 was at last taken to the United States district court of Boston in 1893, where it is now pending.

Dr. Cushman is a descendant of the historical Cushmans who came to Virginia in 1640. He was a friend of Horace Greeley and most of his prominent contemporaries in what might be called the era of rapid mechanical development. In early life he was a newspaper reporter. Some twenty years of his life was spent in central Ohio, and he says: "I never doubted that God made that country."

The Spouting of a Whale.

The whale does not discharge water, but only its breath; this, however, in rushing up into the air hot from the animal's body has the moisture condensed to form a sort of rain, and the colder the air, just as in the case of our own breath, the more marked the result. When the spout is made with the blowhole clear above the surface of the water it appears like a sudden jet of steam from a boiler. When effected, as it sometimes is, before the blowhole reaches the surface, a low fountain as from the street fire plug is formed, and when the hole is close to the surface at the moment a little water is sent up with the tall jet of steam. The cloud blown up does not disappear at once, but hangs a little while, and is often seen to drift a short distance with the wind.